Remarks

Applicants assert that no new matter has been entered as a result of this amendment. No fees are believed to be due with the filing of this amendment. However, if any fees are deemed to be necessary, the Commissioner is hereby authorized to charge any deficiencies to or credit any overpayment to Deposit Account No. 50-1078.

In accordance with Section 714.01 of the M.P.E.P., the following information is presented in the event that a call may be deemed desirable by the Examiner:

JACOB N. ERLICH (617) 854-4000

Dated: February 18, 2004

Respectfully submitted,
Claudia A. Robbins, *et al.*, Applicants

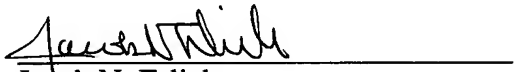
By: 
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Table 2: Typical Purity from Mouse Pancreas Spleen and Thymus (Pel Freez, Rogers, AR) using 0.8 μm MMM columns and QIAGEN RNeasy Mini Kit with associated on-column DNase digestion protocols.

	Purity (pg gDNA/ ng sample) gDNA contamination (quantitative direct PCR assay)			
	Invention		QIAGEN	
	Std. (-DNase)	+ DNase	Std. (-DNase)	+ DNase
Pancreas	1.4×10^{-3}	1.7×10^{-4}	5.2×10^{-1}	6.4×10^{-2}
Thymus	2.7×10^{1}	3.1×10^{-1}	2.9×10^{2}	1.3×10^{2}
Spleen	8.3×10^{-1}	1.8×10^{-1}	9.2×10^{1}	2.7×10^{0}

Table 3: Typical yields from various frozen mouse tissues (Pel Freez, Rogers, AR) using 0.8 μm MMM columns and QIAGEN RNeasy Mini Kit.

	Yield A_{260}			
	Low Load		High Load	
	Invention	QIAGEN	Invention	QIAGEN
Brain (2.5, 30 mg)	0.6 μg/mg	0.6 μg/mg	0.8 μg/mg	0.8 μg/mg
Liver (2.5, 30 mg)	4.6 μg/mg	5 μg/mg	4.5 μg/mg	4.6 μg/mg
Kidney (2.5, 30 mg	2.3 μg/mg	2.9 μg/mg	2.7 μg/mg	2.7 μg/mg
Spleen (2.5, 15 mg)	3.1 μg/mg	2.5 μg/mg	3.7 μg/mg	2.1 μg/mg
HeLa (cells) (5×10^5, 4×10^6)	13.8 μg/10^6	22.8 μg/10^6	15.5 μg/10^6	16 μg/10^6

Table 4: Typical purity using 8-Layer glass-fiber prefiltration column and subsequent isolation using 0.8 μm MMM columns and QIAGEN RNeasy Mini Kit.

	Purity gDNA Contamination (quantitative direct PCR assay)			
	Low Load		High Load	
	Invention	QIAGEN	Invention	QIAGEN
Brain (2.5, 30 mg)	1.2×10^{0}	1.1×10^{2}	1.6×10^{0}	7.2×10^{0}
Liver (2.5, 30 mg)	2.8×10^{-2}	1.3×10^{1}	1.3×10^{-1}	3.7×10^{-1}
Kidney (2.5, 30 mg)	2.1×10^{-1}	5.5×10^{1}	8.9×10^{-1}	1.5×10^{0}
Spleen (2.5, 15 mg)	2.1×10^{-1}	1.9×10^{2}	2.0×10^{-1}	4.2×10^{1}
HeLa (cells) (5×10^5, 4×10^6)	6.8×10^{-2}	6.8×10^{1}	1.9×10^{0}	1.2×10^{1}

Reduction of gDNA contamination is important in many molecular biological assays, in particular, quantitative RT-PCR. RT-PCR is generally a two-step reaction